Packaging Industry in South Africa

Industry Sector Analysis [ISA]

ID: 110893

Regions

ANESA	Africa	Southern Africa	AFDB	

Countries

South Africa				

Divisions [Province]

Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Mpumalanga
Northern Cape	Northern Province	North-West	Western Cape	

Industry: **Food Processing & Packaging**
Sector: **Food Processing/Packaging Equipment**

by: **Bheki Ndimande**
approver: **Wanda Barquin**

Report Date: **07/07/2003**
Expires: **06/30/2006**

This report gives and overview of the South African packaging industry sector and highlights business opportunities benefitial to US companies.

Title:	The Packaging Industry in South Africa
Report Type:	Industry Sector Analysis
ITA Industry Code:	PKG
Contacts:	Bheki Ndimande

Summary

South Africa is ranked fifth by the World Packaging Organization (WPO) in terms of packaging standards and quality of packaging. This means that the country's packaging sector is both competitive and sophisticated. The packaging industry covers a wide range of consumer, commercial and industrial sectors.

Total Packaging Market Size - 2002 (Ex Factory)

Material	`000 Tons	USD billion
Paper	903	0.77
Plastic	470	0.78
Metal	339	0.39
Glass	568	0.15
Other	123	0.03
Total	**2403**	**2.12**

Source: BMI FOODPACK

The South African packaging industry is estimated at US$2.12billion[1] (ex-factory). This translates to 2.4 million tons[2] of material converted into packaging. The industry offers employment to 55,000 people. Food and beverage sectors account for approximately 51 percent of the estimated annual turnover of the packaging industry. Beverages are, however, dominant and take-up 31 percent of the food and beverage turnover accounted for by the food and beverage sector.

The packaging industry has shown commitment to recycling to minimize the impact of packaging on the environment and solid waste streams. The Packaging Council of South Africa (PACSA) claims that recycling is working in South Africa and analysts concur, seeing opportunities in recycling technology.

Market Overview

The packaging industry is still dominated by three main actors: Nampak (who recently merged with Malbak), Kohler and Consol, who control about 80 percent of the market. There are, however, several small and medium sized companies who are competitive in niche packaging industry segments. The South African market, though still developing, is sophisticated and exports some of its products to developed markets (i.e. Filmatics Packaging Systems exports their specialized liquid packaging systems to the Danone Waters' mineral water plant in Philadelphia).

Innovation plays a key role in maintaining a competitive status in this market. This presents opportunities for US companies in the supply of high tech conversion equipment and raw materials.

The South African currency has shown substantial strengthening over the last 12 months. This improvement in the strength of the local currency augurs well for growth in the packaging industry.

Consumers have more disposable income to spend on goods and services, which have a direct link in the production of packaging materials. Industry players take advantage of the strong currency in dealing with their procurement needs.

Approximately 50 percent of imported plastics are used in packaging. After the South African Government (SAG) recently banned thinner plastic bags in favor of thicker recyclable bags, packaging analysts expect to see an increase in the import of plastics raw materials, which comply with the new regulation specifications. The SAG introduced new legislation banning the use of 15-micron bags in favor of 30 microns. The speculation from analysts is that this will create a need to import thousands of tons of low-density polyethylene (LDPE) to cope with the expected increased demand. Pending the reaction of consumers to the new regulations, analysts also pointed to a possible procurement of packaging conversion machinery that enables an easier and quicker conversion to the 30-micron plastics bags. The speculation of a constant growth in imports of raw materials and converting machinery in the plastics industry is further enhanced by other factors, such as an increasing replacement of glass bottles by polyethylene terephthalate (PET) in the cosmetics and beverage market.

Best Prospects

Local packaging companies will invest huge financial resources in the cutting-edge technology to maintain their market share. One of the leading printing and packaging companies invested US$12.5million[3] in the purchase of flexographic printing machines. These are machines that use web-fed flexographic printing technology to produce folding cartons for well-known brands in food, healthcare and detergents industries. Although the South African market might be small in relation to the United States, United Kingdom, Germany or Japan, accounting for only 0.5 percent of global GDP, the country is the economic powerhouse for the whole African continent.

There are an increasing number of South African packaging printers and converters who are investing in user-friendly equipment to enable them to compete in terms of quality with their European and American counterparts. Industry players claim that flexography is gaining momentum in South Africa and a number of printers have invested in the latest technology to print to international standards. An estimated 20 percent of high-quality half-tone work is printed flexographically in South Africa and this figure is set to grow. However, gravure will remain a competitive force in package printing South Africa for the foreseeable future.

Major companies that supply crates to the dairy, beverage, sorghum, agricultural, bakery and materials handing industries site rises in raw materials costs as a resultant switch to recycled materials. Most of the bigger players have their own crate pools and are increasingly opting for recycled crates.

According to some industry players, growth in the plastic crates sector is fuelled by opportunities in the fresh produce and deciduous fruit export market, where legislation and performance/yield demands are driving the move from corrugated to plastics packaging.

The new plastic regulation follows a landmark agreement on the management of plastic bags by government, business and labor aimed at protecting the environment. The new rules regulate that plastic bags should now be made thicker, about 30 microns, so they can be easily recycled. This is to strengthen the recycling industry and to create jobs. Recycling is working in the South African packaging industry as can be seen in the latest PACSA's statistics, which show that the packaging and related industries recycle over one million tons of material per annum - saving the local authorities an estimated US$28.13million in waste disposal costs and employing 100,000 people.

This calls for an upgrade of existing recycling facilities by packaging firms. US recycling machinery technology will play an important role in preparing South African companies to cater for the new legislation.

Total tonnage consumed during 2000:
Glass - 521,000 metric tons of which 509,000 is converted into packaging. Included are 110,000 tons of returnable, reusable glass bottles which might make up to 30 trips, further substantially increasing recycling. This tonnage is excluded in the following tables.
Paper and Board - 1,990,000 tons, of which 868,000 is converted into packaging.
Plastics - 923,000 tons of which 465,000 tons is converted into packaging.
Metal (tinplate) - 262,969 tons: all packaging.

Table 1: Tonnage of Material Converted into Packaging

	1984	**2000**	**Increase**
Paper & Board	672,000	868,000	196,000
Plastics	172,000	465,000	293,000
Metal	202,000	263,000	61,000
Glass	365,000	509,000	144,000
Total	**1,411,000**	**2,105,000**	**694,000**

Table 1 represents an increase in throughput of materials of 694,000 tons, equivalent to 49% over the 16-year period 1984 to 2000.

Table 2: Tonnage Recycled

Total	**486,000**	**2,105,000**	**694,500**

Table 2 represents an increase in recycling of 640,500 tons or 132% over the 16-year period 1984 to 2000 (*compared to the 49% increase on the tonnage of materials converted to packaging)*.

Notes: * Tonnage recycled include non-packaging items
** Excludes 110,000 tons converted into reusable, returnable containers - see below

GLASS

Glass is currently recovered by 149 appointed agents throughout South Africa, Namibia, Botswana, Lesotho and Swaziland. Total glass packaging produced in 2000 was 509,000 tons. Of this, 110,000 was converted into returnable, reusable multi-trip containers. It is estimated that these containers make up to 30 trips each before being recycled into glass containers. The tonnage of glass recycled was 102,300 tons. The potential for recycling waste glass in enormous. Eighty five percent of malt beer and 60 percent of carbonated soft drink sold in South Africa are packaged in returnable, reusable voluntary deposit glass containers.

Over the past year there was good growth as glass performed well in the in malt beer and wine export market.

PAPER AND BOARD

There are approximately 250 paper and board converters across a number of sectors in South Africa - including packaging, printing and publishing, newsprint and tissue, and disposable products. The paper and board industry has combined sales of more than US$1.25 billion[4] per annum and employs 70,000 people. The packaging sector accounts for 56 percent of domestic production, followed by printing and publishing (23%) and newsprint (13%). Tissue and disposable products account for eight percent of domestic demand.

Packaging products include corrugated board, cartonboard, linerboard, bags and sacks, flute and white top linerboard. Almost every type of paper produced in South Africa has a recycled content. Of the total tonnage produced, 868,000 was converted into packaging. In 2000, the tonnage of paper and board recycled, including non-packaging items, was 770,000 tons.

The primary growth area in paper and board sector is in the corrugated market, which is stimulated by favorable exports of fruit and wine during 2002.

PLASTICS

Total tonnage of plastics converted domestically in 2000 was 923,000 tons, of which 465,000 tons was converted into packaging, both primary and secondary. Tonnage recycled, including non-packaging items was 133,000 tons, which places South Africa among the leaders if plastics recycling in worldwide. The packaging component is estimated at 90,440 tons.

There are presently over 123 companies recycling plastics in South Africa, not only for environmental but for financial/economic reasons as well. Growth areas are in rigid plastics, which performed well in the beverage and food markets at the cost of other packaging materials. Flexible plastics demand also grew due to positive performance in the value-added top end of the market.

METALS

More than 95 percent of all steel produced is recycled after use and on the packaging front; the beverage can industry is leading the way.

The estimated tonnage of tinplate produced locally in 2000 was 266,102 tons, while an additional 5,000 tons was imported. It is estimated that the total tinplate converted into domestic packaging (i.e. beverage, aerosol, food and general line containers) was 219,466 tons. Of this estimated net tinplate tonnage, 120,912 tons or 55 percent was recycled.

THINWALLING OF CONTAINERS

Another major contribution towards waste minimization is the packaging industry's continuous program to reduce the amount of material used in the manufacture of containers. This process is known as thinwalling or lightweighting, some examples of which may be seen in the following table:

Beverage Can	1955	73g	2000	31g
Corrugated Box	1970	559g	2000	530g
Food Can	1955	84g	2000	53g
Glass Bottle	1985	575g	2000	395g
PET Bottle	1979	68g	2000	47g
Supermarket Bags	1982	30um	2000	14um

The proliferation of concentrated products and refill packs on supermarket shelves further reduces the amount of packaging material that would otherwise be consumed or become available for disposal. This clearly demonstrates the industry's commitment to the Three Rs program - Reduce, Reuse and Recycle.

In regard to corrugated, the latest technologies allow for greater thinwalling, but this is at the expense of recycling. This further enhances local analysts projections of opportunities in recycling, in line with the South African Government's emphasis on a clean environment.

The bulk of our raw material inputs are commodities supplied by large international players. The improvement in the strength of the Rand[5] over the last year is likely to positively influence investment by local packaging players in converting machinery, to be able to compete globally.

Protective Packaging

Protective packaging demand is projected to increase nearly five percent worldwide annually to $3 billion in 2006, benefiting from expanding Internet and mail order catalogue sales and highly customized requirements of end-use packaging applications. Reports predict foamed and other plastic protective packaging to continue to expand at the expense of paper board and related materials, especially for products such as electronics and instrumentation, as a result of plastics' low mass and excellent cushioning capabilities.

Market Trends

Recent projections into the future of packaging point to plastics as the major growth sector in the industry, followed by glass, paper and then metal. But plastics are a relatively new phenomenon, and are still undergoing rapid technological improvement. A representative of one of the largest plastic packaging companies in South Africa was quoted as saying that he thinks plastic has made huge inroads into the end-users daily lives, and that this is the reason why they have invested in this industry. He said that although this trend had been less obvious in recent years, the demand for plastic packaging tended to grow at two or three times the rate of the growth of GDP. His company grew its sales by about eleven percent in the year to February 2003, compared to a two to three percent growth in GDP in the same period.

South Africa's thermoformed PVC packaging suppliers to the food industry are converting to PET, in line with international trends. One of the major plastic packaging companies invested some US$2.5million[6] in the PET thermoformed packaging field over the last year. There are two reasons sited for the move by packaging companies to PET. Firstly, meeting the demands of their customers who are coming under increasing pressure from leading retailers to PVC food packs with PET packaging. Secondly, PET is widely accepted as an "environmentally friendly" material in that its production raises few environmental health issues, and thanks to SA Polyester Recyclers, facilities now exist for PET recycling in South Africa. These companies piggyback on this recycling initiative to minimize the environmental impact of disposable packaging.

South African companies are gradually taking their place in the mainstream of global trade. The introduction of the African Growth and Opportunity Act (AGOA)[7] has positively influenced the export of goods from South Africa to the United States. Packaging companies realize that if they are to partner their customers in their export drive, they have to supply the correct quality and type of packaging, hence the decision to move to the new world of PET packaging.

According to one Managing Director quoted in Packaging Review recently, growth in the plastic crates sector is being fuelled by opportunities in the fresh produce and export deciduous fruit markets, where new legislation and performance/yield demands are driving the move from corrugated to plastics.

Recently, speakers at the annual general meeting of the Northern Region of the Institute of Packaging said, the gradual emergence of an African middle class should have positive spin-offs for fast moving consumer goods (FMCG) manufacturers who require packaging for products such as food and beverages, as well as clothing and cellular phones. Donor-driven purchasing (about US$ 6 billion/year) should also boost growth by encouraging the production and packaging of items such as emergency relief supplies.

The rest of Africa represents a positive export destination for local South African packaging companies. In 2000, South Africa exported over USD3.13 billion-worth[8] of goods to other African countries. To maintain growth, local packaging companies must succeed in penetrating foreign markets.

Industry analysts forecast individual sectors to follow the trends as discussed below:

1. Paper and Board

The continued forecast growth in export demand, particularly in the wine industry bodes well for the paper and board market. Corrugated constitutes the largest share of the paper and board market and any growth notably impacts on the entire sector.

2. Plastic

The gains made by plastic, particularly in the rigid plastics sector, are expected to continue over the medium term. The convenience of plastic relative to other packaging materials is noted as one of the principal reasons for its popularity.

3. Metal

The negative performance of metal over the last few years is forecast to continue in the local market. Export demand is, however, forecasted to grow well, particularly into Africa.

4. Glass

Glass demand grew in certain prominent end-use markets, which positively impacted on this sector. Growth is forecast over the next few years as positive steps are taken to increase market presence.

5. Other

Producers are moving back to wooden boxes due to cost advantages, which bodes well for static market performance over the next few years. Packaging demand is forecasted to grow at rate of 1.9% in 2004r. Annual medium growth forecast is set between 1.8% and 2.0% until 2010.

Import Market

Although most of the raw materials are sufficiently supplied by the local market, there are specialized materials that will be mentioned later in this report, that the market still imports. Therefore, the report focuses on both packaging machinery and only limited lines of raw material imports.

Harmonized (HS) Code or tariff category, which represents the machines under discussion, is 8422. The definition of this code includes:

- machinery for filling, closing, sealing, capsuling or labeling bottles, boxes, bags or other containers; other packing or wrapping machinery; machinery for aerating beverages.

The overall South African import figures for packaging are estimated at US$88.75 million for the year 2002[9]. This represents an increase of approximately an increase of 22 percent compared to 2001[10].

Like most markets in developing economies, the South African packaging industry sector is price sensitive. One of the major importer and distributor of food processing and packaging machinery, confirmed price as the dominant deciding factor that determines the supplier of packaging machinery in this market. Although Germany, Italy and France have dominated the import market over the years, the strong Euro has diverted the focus of importers to the Far East (China, India, etc). Importers are interested in looking at US products that are relatively reasonably priced and also complemented by quality.

Competition

Foreign competition in the form of domestic acquisitions has increased over the last five years. Analysts maintain that the viable role of U.S. companies, in addition to the above, will remain cooperative and technological.

The U.S. already has a presence in the South African packaging market (i.e. Hudson-Sharp, DuPont, Rohm & Hass, Anglo Vaal, Owen Illinois Inc., etc., among others). Owen Illinois owns 90% of Consol Glass and operates four glass factories around South Africa. There is, however, stiff competition from local, European and Far East suppliers of packaging machinery. Bowler Metcalf is still one of the smaller local packaging companies, with a market capitalization of US$20.63m against Nampak's US$0.68 bn, Malbak's US$0.18bn and Astrapak's US$33.75m.[11]

Nampak remains the dominant player in the South African packaging industry with an overall market share of 43 percent. To reduce the operational risk, the group comprises 20 separate businesses each of which operate at world class manufacturing standards. Nampak is operational in a diverse range of products and markets. Its strengths are in the paper and high-growth metal packaging markets, but it also has exposure to the high growth plastic market. Its recent major with Malbak has elevated Nampak's share in the plastics market.

End Users

The following table shows estimates of an analysis of the packaging markets:

PACKAGING MARKETS IN SOUTH AFRICA BY WEIGHT ALL MATERIALS

Total 2.1 million tons

Product	% Consumption
Beverages	31
Food	20
Other	49

This market covers a wide range of consumer, commercial and industrial sectors. The food and beverage industry is the major end-user of packaging material with 51 percent consumption. Other, in the table represent, *inter alia*, chemicals and paint, household products, petroleum products, etc.

The use of a particular line of packaging material depends, among others, on the following factors:

- consumer preferences.

- availability of disposable income,
- weakening or strengthening of the currency.
- compliance with environmental regulations

Sales Prospects

A study done by one of the packaging consulting firms in South Africa predicts increasing opportunities for a number of niche materials and technologies in the flexible packaging market. Among these are:
- PEN/PET coextruded polyester film - expected to benefit from downgauging and packaging reduction initiatives in niche laminate applications requiring enhanced oxygen barriers.
- Liner Motor Simultaneous (LISIM) stretching, a type of film extrusion process developed jointly by DuPont (the US PET manufacturer) and Brueckner (the German extrusion line manufacturer) - used in the production of polyester and polypropylene films and forecast to grow in importance as investment costs reduce. Film produced with this technology offers substantial strength, productivity and optical advantages over traditional stenter-oriented film.
- PVOH film - forecast to grow by 8-10 percent per annum over the next five years as it builds on existing niche applications particularly with water solubility.
- Bespoke laminating adhesives - providing converters with the ability to create, in-house, optimum adhesive solution for each job; rather than rely on of-the-shelf compromises.
- Nan composites - a coating technology that provides a barrier coating that's substantially higher than oxygen and moisture barrier of EVOH and Pad alternatives. Higher costs are preventing their use currently, but economics may change for niche applications.

Industry analysts also pointed to certain raw materials supplies where U.S. companies would competitive:
- hardwood pulp, used for making coated label paper and
- hard aluminum foil
- polyethylene coated blitched sulphite board

None of the local suppliers produce these raw materials and as a result they are imported from other countries including France, Italy, Tunisia, USA, etc.

Market Access

Import Control

In terms of section 2 of the Import and Export Control Act, the Minister of Trade and Industry may, whenever he deems it necessary or expedient in the public interest, by notice in the Gazette, prescribe that no goods other than goods of a specific class or kind (a) shall be imported into the Republic of South Africa (RSA); or (b) shall be imported into the RSA except under authority of and in accordance with the conditions stated in a permit issued by him or by a person authorized by him.

The purpose of the offering is to ensure that imported second hand goods do not destroy the Southern African Customs Union (SACU) industry. The offering also enhances control for environmental health and security reasons, and safety and quality compliance. It also enhances control for the purpose of complying with environmental reasons.

Distribution/Business Practices

Distribution methods in South Africa vary with different companies. Major companies usually have procurement divisions responsible for all capital and material acquisitions. In this case, the exporter will deal directly with the buyer on the terms agreed upon by both parties. Subsidiaries of a local company also have the right to enter into procurement agreements subject to approval by top management and the price of the subject goods. Smaller companies, however, usually use non-stocking sales agents who are knowledgeable of the supplier market.

U.S. companies can also enter into an agent/distributor agreement, or set-up a joint venture with an existing local company.

Financing

Depending on the contracting parties knowledge of each other with regard to their previous dealings, the import/export transaction can be concluded without the interference of the third party. However, where the opposite applies, there are finance institutions in place, which act as an intermediary between the buyer and the seller. The two most active institutions that deal with trade financing are the Export-Import Bank of the United States (ExIm Bank), which is represented in South Africa, and the Small Business Administration (SBA). ExIm Bank, in addition to providing working capital loans, also provides credit insurance and guarantees on the buyer.

The South African Government's economic growth policy has, as one of its major priorities, the drastic reduction of unemployment. Transactions, which are financially subsidized by the South African government, should be seen to have the potential to create employment for the locally unemployed.

Key Contacts

The Institute of Packaging (IPSA)
Contact: Mr. Keith Pearson - National Chairman
Tel: 27 11 883-1901
Wbsite: **www.ipsa.org.za**

The Packaging Council of South Africa (PACSA)
Contact: Mr. Owen Bruyns - Executive Director
Tel: 27 11 783-4782/3
Email: **packagec@cis.co.za**
Website: **www.packagingsa.co.za**

Packaging Review South Africa
Contact: Ms. Gill Loubser - Editorial Director
Tel: 27 21 671-1140
Email: **gill@packagingreview.co.zo**

Upcoming Trade Shows

PACK EXPO 2003
October 13-15, 2003
Las Vegas, Nevada
USA

PROPAK 2004
March 9-12, 2004
Export Centre, Nasrec
South Africa

DIRECT IMPORT COSTS TEMPLATE

The example below shows the case of machinery imported for resale or own-use by a company/distributor.

Base Price	100.00
Freight 8 percent (average)	8.00
C&F	108.00
Insurance 1.5 percent of C&F	1.62
Dutiable Base = CIF	109.62
VAT Base	109.62
VAT 14 percent	26.35
Landed Cost	**135.97**

Sources:

The Packaging Review South Africa
Engineering News

BMI Foodpack

---

[1] Exchange Rate: $1.00 = R10.00
[2] Tons = Metric Tons
[3] Exchange Rate: US$1.00 = R8.00
[4] Exchange Rate: US$1.00 = R8.00
[5] South African Currency
[6] Exchange Rate: US$1.00 = R8.00
[7] **http://agoa.gov/**

[8] Exchange Rate: USD1.00 = R8.00
[9] Source: Department of Trade & Industry.
[10] Stats. for individual products not available.
[11] Rate of Exchange: US$1 = R8.00